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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/766,027	01/29/2004	Yasutaka Ito	248168US90CONT	2028
22850	850 7590 12/21/2004		EXAMINER	
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C.			PAIK, SANG YEOP	
1940 DUKE STREET ALEX ANDRIA, VA 22314			ART UNIT	PAPER NUMBER
	,		3742	

DATE MAILED: 12/21/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary		Application No.	Applicant(s)	- Ch				
		10/766,027	ITO ET AL.	-				
		Examiner	Art Unit					
		Sang Y Paik	3742					
Period f	The MAILING DATE of this communication app or Reply	pears on the cover sheet v	vith the correspondence addr	ess				
THE - Ext afte - If th - If N - Fail	MORTENED STATUTORY PERIOD FOR REPL' MAILING DATE OF THIS COMMUNICATION. ensions of time may be available under the provisions of 37 CFR 1.1 or SIX (6) MONTHS from the mailing date of this communication. e period for reply specified above is less than thirty (30) days, a reply operiod for reply is specified above, the maximum statutory period y ure to reply within the set or extended period for reply will, by statute or reply received by the Office later than three months after the mailing and patent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, however, may a y within the statutory minimum of th will apply and will expire SIX (6) MO , cause the application to become A	reply be timely filed irty (30) days will be considered timely. NTHS from the mailing date of this comi	munication.				
Status								
1)⊠	Responsive to communication(s) filed on <u>07 O</u>	ctober 2004.						
· · ·	•	action is non-final.						
3)□	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is							
	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.							
Disposi	tion of Claims							
4)⊠	Claim(s) 1,2,13 and 14 is/are pending in the ap	oplication.						
	4a) Of the above claim(s) is/are withdrawn from consideration.							
5)□	Claim(s) is/are allowed.							
6)⊠	☑ Claim(s) <u>1,2,13 and 14</u> is/are rejected.							
7)	Claim(s) is/are objected to.							
8)[Claim(s) are subject to restriction and/o	r election requirement.						
Applica	tion Papers							
9)[The specification is objected to by the Examine	:Г.						
10))) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.							
	Applicant may not request that any objection to the	drawing(s) be held in abeya	ance. See 37 CFR 1.85(a).					
	Replacement drawing sheet(s) including the correct	ion is required if the drawing	g(s) is objected to. See 37 CFR	1.121(d).				
11)	The oath or declaration is objected to by the Ex	caminer. Note the attache	ed Office Action or form PTO	-152.				
Priority	under 35 U.S.C. § 119							
12)	Acknowledgment is made of a claim for foreign	priority under 35 U.S.C.	§ 119(a)-(d) or (f).					
a)	□ All b)□ Some * c)□ None of:							
	1. Certified copies of the priority document	s have been received.						
	2. Certified copies of the priority documents	s have been received in a	Application No					
	3. Copies of the certified copies of the prior	rity documents have bee	n received in this National St	age				
	application from the International Bureau							
*	See the attached detailed Office action for a list	of the certified copies no	t received.					
Amarka-								
Attachmei	nt(s) ce of References Cited (PTO-892)	4) Interview	Summary (PTO-413)					
2) Noti	ce of Draftsperson's Patent Drawing Review (PTO-948)	Paper No	(s)/Mail Date					
3) 🔯 Info	mation Disclosure Statement(s) (PTO-1449 or PTO/SB/08) er No(s)/Mail Date あわずいりによっている。	5)	Informal Patent Application (PTO-1	52)				

U.S. Patent and Trademark Office PTOL-326 (Rev. 1-04)



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DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 2. Claims 1, 2 and 5-12 are rejected under 35 U.S.C. 102(b) as being anticipated by Nobori et al (US 5,616,024).

Nobori shows the ceramic heater claimed including a ceramic substrate, a plurality of heating element with a mixture of concentric or spiral pattern and a pattern of a repeated winding line in the peripheral portion of the ceramic substrate. Nobori et al further discloses the ceramic substrate made of nitride and carbide ceramic with the through holes for providing lifting pins.

The heating element made of metal would inherently have metal particles therein.

Claim Rejections - 35 USC § 103

- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. Claims 13 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nobori et al (US 5,616,024) in view of Nozaki et al (US 5,264,681).

Nobori shows the ceramic heater claimed except the heating element formed by printing.

Nozaki shows a ceramic heater having a heating element formed by a coil wire or a metal paste that is printed to form a heating element. In view of Nozaki, it would have been obvious to one of ordinary skill in the art to adapt Nobori with a heating element formed of a metal paste in place of the heating coil as an alternative form of a heating element that is printed on the ceramic substrate to provide a ceramic heater that can also withstand a high temperature and prolong the life of the heater.

Response to Arguments

5. Applicant's arguments filed 10/7/04 have been fully considered but they are not persuasive.

The applicant argues Nobori does not show the resistance heating element formed of a concentric or spiral pattern with a pattern of a winding line, and further argues that what Nobori shows is a pattern of a spiral convolution.

As the applicant noted, Nobori forms a heating pattern that is of a spiral convolution, but as it forms such convolution, the wind lines are formed along its spiral pattern. This is clearly shown in the drawing figures. There is no claimed structural difference between the claimed pattern and the Nobori pattern.

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

MONTHS of the mailing date of this final action and the advisory action is not mailed until after

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final action.

the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sang Y Paik whose telephone number is 571-272-4783. The examiner can normally be reached on M-F (9:00-4:00) First Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robin Evans can be reached on 571-272-4777. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Sang Y Paik
Primary Examiner
Art Unit 3742

syp